

## Mapping Preparation

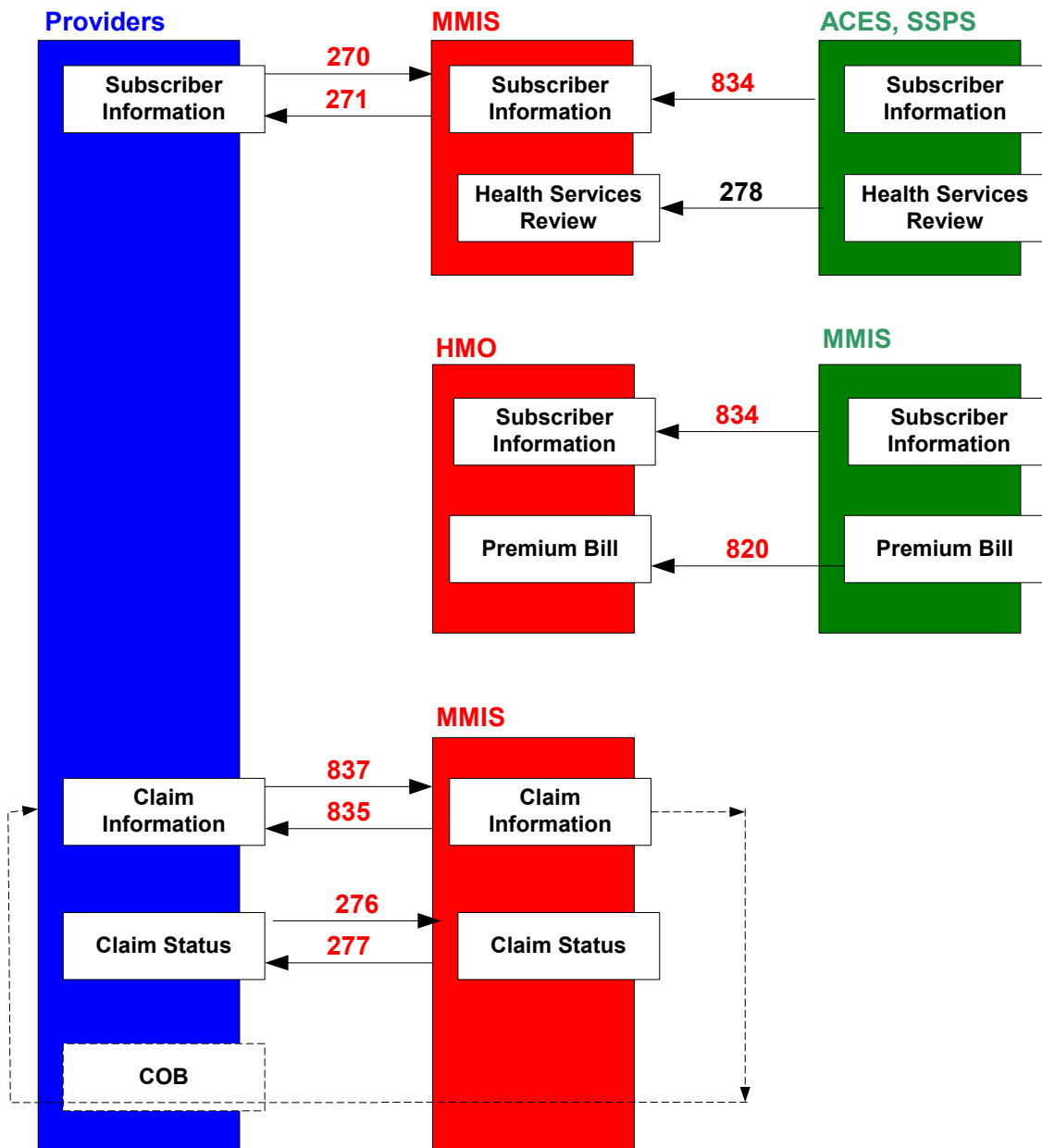
This is a draft of instructions for Data TAG members preparing to map legacy fields to HIPAA transactions, using the OnlyConnect tool. We can be flexible about how this is going to work. This will serve as a guideline to get started.

As an example of what the HIPAA transactions are, following is a diagram showing the flow of MMIS HIPAA transactions. The first/blue column represents transaction to and from any providers. The second/red column represents transactions to and from any entity acting as a payer. The third/green column represents transactions to and from any entity acting as a sponsor.

**PROVIDERS**

**PAYERS**

**SPONSORS**



## STEP ONE: Load Legacy Records into Tool

We need the layout of the legacy records to map against. For example, for MMIS we loaded all of these record to do all the transactions:

HIPAA Transactions Used	MMIS Legacy Records
834, 270, 271, 278, 820	RECIP-ELIG-FILE
834, 270, 271, 278, 820	PLAN-FILE
834, 270, 271, 278	PRIOR-AUTHORIZATION
834, 270, 271, 278	PROCEDURE-MASTER
834, 270, 271, 278	DIAGNOSIS-MASTER
837, 835, 276, 277	MEDICAL-CLAIM
837, 835, 276, 277	INSTITUTIONAL-CLAIM
837, 835	PROC-DIAG-DRUG
835	PROV-CHARGE-FILE
all	PROV-FILE

For each legacy record, we need the following columns:

In an EXCEL file for each field:

1. FIELD NUMBER
2. FIELD NAME
3. FIELD DESCRIPTION (if available)
4. DATA TYPE: either in SQL or COBOL data formats
5. FIELD LENGTH IN BYTES
- ~~6. WHETHER REQUIRED UPON INPUT, i.e., if translating from HIPAA to legacy, is the legacy field required?~~
- ~~7. WHETHER ALWAYS PRESENT UPON OUTPUT, i.e., if translating from legacy to HIPAA, will the legacy field always contain data? (for cases where the HIPAA field is required)~~

Where there are multiple occurrences of a field, enter them each on their own row with a 1, 2, 3, appended to the field name. No group or redefinition names, only the fields as they will probably be mapped.

Probably your DBAs are best suited to do this. Columns 1 – 5 probably can be extracted from your system database. But columns 6-7 will need to be filled in by a system analyst/expert.

Email the files, with the system name, to Yong Ju at [yongjuli@sierrasystems.com](mailto:yongjuli@sierrasystems.com)

## **STEP TWO: Learn About the HIPAA Transaction**

Before coming the mapping session:

[1] Read the "Data Overview" sections of the HIPAA Implementation Guide.

[2] Read the Mapping Report for MMIS for the relevant transaction, to see what your goal will look like. E.g., "MMIS to 270" which has all HIPAA fields, not the report that has "Mapped Fields Only" on the title.

## **STEP THREE: Come to Mapping Sessions**

Pick one or two people who know most about the legacy fields related to the transaction being mapped.

Schedule time with either Francine or Yong Ju to do the actual mapping. This must take place in the "Lab" on the 4<sup>th</sup> floor of Building 1, since that's where we're set up to access the tool.

An 837 mapping might take 10 hours, whereas a 276 mapping might take 3 hours. Schedule 2-4 hour sessions.

## **STEP FOUR: Review the Reports**

After the mapping sessions, we will send you reports, both HIPAA to legacy and legacy to HIPAA. Review these with relevant parties and answer open questions.

When you think you're ready to finalize the mapping, schedule another brief final meeting with Francine or Yong Ju (try to switch to the other person than the one who did your initial mapping).

Yong Ju will email you any reports you ask for, simply tell her which reports (see description of reports below).

We have come up with a way to email reports, using an ACCESS viewer called SnapShot. ACCESS 2000 comes with this viewer. Anyone who doesn't have that (or any) version of ACCESS can download the viewer free from the web at:

<http://www.microsoft.com/accessdev/articles/snapshot.htm>

All mapping reports will be available on MAA01a//J:\HRC\Mapping Reports. We will update this directory every Friday afternoon with all new work that has been done that week.

## Description of Mapping Reports

Here's a list of the four types of reports you will find:

- **HIPAA Transaction to Legacy:** For each system+transaction (e.g., MMIS 835) there are two reports that show HIPAA fields on the left and legacy fields on the right:
  - **"HIPAA 999 to XXXX":** A long report showing **all** HIPAA transaction fields on the left and any corresponding comment or mapped legacy field on the right, e.g., "HIPAA 835 to MMIS". This report will help you see what are all the available fields in the HIPAA transaction.
  - **"HIPAA 999 to XXXX Mapped Fields Only":** A shorter report showing only the HIPAA transaction fields that have a corresponding comment or mapped legacy field, e.g., "HIPAA 835 to MMIS Mapped Fields Only". This report will show you what fields have so far been mapped to the HIPAA transaction.
- **Legacy Records to HIPAA:** For each system, there are two reports with legacy fields listed on the left and HIPAA fields on the right:
  - **"XXXX to HIPAA":** A long report showing **all** legacy records and fields on the left and any corresponding mapped HIPAA field on the right, e.g., "MMIS to HIPAA". This report will help you analyze whether any critical legacy fields should be mapped to HIPAA if they are not currently mapped to HIPAA yet.
  - **"XXXX to HIPAA Data Length Problems":** A shorter report showing only the legacy fields that are mapped to HIPAA fields, **and where** the HIPAA length is longer than the legacy length, e.g., "MMIS to HIPAA Data Length Problems". This report will help you identify where legacy fields need to be made longer so as not to truncate an incoming HIPAA field that's longer than the current legacy field.

**Comment Types:** For the HIPAA to Legacy reports, the legend on the last page explains the comment types, although not every comment fits into these categories well. The "translation" comment type is for information only, if you want to understand more about the HIPAA transaction and translation. All other comment types should be analyzed by interested parties.

Feel free to contact me any time, and send feedback.

phone: 360-220-6489 (area code needed)

email: [francine4us@yahoo.com](mailto:francine4us@yahoo.com)

# “HIPAA 999 to XXXX” or “HIPAA 999 to XXXX Mapped Fields Only”:

Snapshot Viewer - [HIPAA 271 to MMIS mapped fields only.snp]						
File View Window Help						
Pos#	SegID	HIPAA Name	DT	Req	File	Field
020	TRN04	Trace Assigning Entity Additional Identifier	AN30	S		
030	NM01	Subscriber Name	R			
030	NM1	Subscriber Name	R			
030	NM101	Entity Identifier Code	ID3	R		Hard Code "IL"
030	NM103	Subscriber Last Name	AN35	S	Recip-Elig-File	RECIP_LAST-NAME X(13) Translation
030	NM104	Subscriber First Name	AN25	S	Recip-Elig-File	RECIP-FIRST-NAME X(9) Translation
030	NM105	Subscriber Middle Name	AN25	S	Recip-Elig-File	RECIP-MIDDLE-INIT X(1)
030	NM108	Identification Code Qualifier	ID2	S		Send "M" with recip-client-ID Translation
030	NM109	Subscriber Primary Identifier	AN80	S	Recip-Elig-File	RECIP-CLIENT-ID X(09)
040	REF	Subscriber Additional Identification	S			Multiple REF segments for different ID's. Translation
040	REF01	Reference Identification Qualifier	ID3	R		Send "3H" with recip-case-number (optional); if pat act # was rec'd in 270, send "E,J" with it (req'd); send "SY" with SSN (opt); send "H,U" with ID card number (opt). HIPAA Required
040	REF02	Subscriber Supplemental Identifier	AN30	R	Recip-Elig-File	RECIP-CASE-NUMBER X(11)
040	REF02	Subscriber Supplemental Identifier	AN30	R	Medical-Claim	PATIENT-ACCT-NUMBER X(20)
040	REF02	Subscriber Supplemental Identifier	AN30	R	Recip-Elig-File	SOC-SEC-NUMBER 9(09)
060	N 3	Subscriber Address	S			
060	N 301	Subscriber Address Line	AN55	R	Recip-Elig-File	RECIP-ADDR-LINE-1 X(25)
060	N 302	Subscriber Address Line	AN55	S	Recip-Elig-File	RECIP-ADDR-LINE-2 X(20)

## ***Column Headings:***

Pos# = This corresponds to the segments' positions within the transaction, as used in the HIPAA Implementation Guides.

SegID = The segment and field number which identifies each HIPAA data element.

HIPAA Name = The name of the data element in the HIPAA Guide.

DT = The first "DT" column is the data type and length of the HIPAA data element: AN=alphanumeric, ID=coded value, R=real number.

Req = This shows whether the HIPAA field is "R"equired or "S"ituational. If situational, the HIPAA Guide might describe the conditions under which the field is required, so the Guide must be consulted.

File = The name of the legacy file being mapped.

Field = The name of the legacy field being mapped.

DT = The second "DT" column is the data type and length of the legacy field. If in COBOL format, X(n) is alphanumeric, 9(9) is numeric, S9(7)V99 is a signed number with 7 digits to the left of the decimal point and 2 digits after.

Comment = Various types of comments to explain how to translate between the legacy system and HIPAA.

Comment Type = The type of comment is a way to pull out certain types of issues identified in the comments. There is a legend explaining each comment type on the last page of every report.

“XXXX to HIPAA”:

Snapshot Viewer - [MMIS to HIPAA.snp]						
File View Window Help						
REPORT - MMIS to HIPAA						
File	Field	DT	Transaction	Pos#	SegID	HIPAA Name DT Req
Diagnosis-Master	CLERK-IDENTIFICATIO	9(3)				
	DATE-OF-LAST-TRANS	9(5)				
	DIAG-ABORT-IND	X(1)				
	DIAG-ACCID-INDIC	X(1)				
	DIAG-CODE+CD-9	X(7)	270	139	III02	Industry Code AN30 R
	DIAG-CODE+CD-9	X(7)	271	171	III02	Industry Code AN30 R
	DIAG-CONTROL-CODE	X(1)				
	DIAG-FAM-PLAN-IND	X(1)				
	DIAG-NAME	X(40)				
	DIAG-SCHEME-CODE	X(1)				
	DIAG-STERL-IND	X(1)				
	EMERG-TRMINT-IND	X(1)				
	MAXIMUM-AGE	9(3)	271	130	EB 10	Benefit Quantity R15 S
	MINIMUM-AGE	9(3)	271	130	EB 10	Benefit Quantity R15 S
	PA-REQUIRED-BEG-DT	9(5)				
	PA-REQUIRED-END-DT	9(5)				
	PRIOR-AUTH-IND	X(1)				
8/28/2001 5:19:41 PM						
MMIS to HIPAA						
Page 1 of 73						



## ***Column Headings:***

File = The name of the legacy file being mapped.

Field = The name of the legacy field being mapped.

DT = The first "DT" column is the data type and length of the legacy field. If in COBOL format, X(n) is alphanumeric, 9(9) is numeric, S9(7)V99 is a signed number with 7 digits to the left of the decimal point and 2 digits after.

Pos# = This corresponds to the segments' positions within the transaction, as used in the HIPAA Implementation Guides.

SegID = The segment and field number which identifies each HIPAA data element.

HIPAA Name = The name of the data element in the HIPAA Guide.

DT = The second "DT" column is the data type and length of the HIPAA data element: AN=alphanumeric, ID=coded value, R=real number.

Req = This shows whether the HIPAA field is "R"equired or "S"ituational. If situational, the HIPAA Guide might describe the conditions under which the field is required, so the Guide must be consulted.

# "XXXX to HIPAA Data Length Problems":

Snapshot Viewer - [MMIS to HIPAA Data Length Problems.snp]						
File View Window Help						
REPORT - MMIS to HIPAA Data Length Problems						
File	Field	DT	Transaction	Pos#	SegID	HIPAA Name
Diagnosis-Master	DIAG-CODE-ICD-9	X(7)	270	139	III02	Industry Code
	DIAG-CODE-ICD-9	X(7)	271	171	III02	Industry Code
	MAXIMUM-AGE	9(3)	271	130	EB 10	Benefit Quantity
	MINIMUM-AGE	9(3)	271	130	EB 10	Benefit Quantity
Institutional-Claim	ADMISSION-DATE	9(5)	837 Institutional	137	DTP 03	Admission Date and Hour
	ADMISSION-HR	X(2)	837 Institutional	137	DTP 03	Admission Date and Hour
	ADMIT-DIAGNOSIS	X(06)	837 Institutional	231	HI 02	Industry Code
	ALLOWED-CHARGE	S9(7)V99	277	180	SVC03	Line Item Provider Payment Amount
	ALLOWED-CHARGE	S9(7)V99	837 Institutional	375	SV206	Service Line Rate
	ALLOWED-CHRG-SOURCE	X(1)	835	020	CAS01	Claim Adjustment Group Code
	CARRIER-NAME	X(20)	837 Institutional	005	SBR04	Insured Group Name
	CLAIM-STATUS	X(1)	277	100	STC01	Health Care Claim Status Category Code
	CLAIM-STATUS	X(1)	277	100	STC01	Health Care Claim Status Code
	CLAIM-STATUS	X(1)	835	010	CLP02	Claim Status Code
	COMPUTED-RECIP-PMT	S9(7)V99	835	010	CLP05	Patient Responsibility Amount
	COMPUTED-RECIP-PMT	S9(7)V99	837 Institutional	178	AMT02	Patient Amount Paid
	DATE-OF-ADJUDICATIO	9(5)	277	100	STC06	Adjudication or Payment Date

## ***Column Headings:***

File = The name of the legacy file being mapped.

Field = The name of the legacy field being mapped.

DT = The first "DT" column is the data type and length of the legacy field. If in COBOL format, X(n) is alphanumeric, 9(9) is numeric, S9(7)V99 is a signed number with 7 digits to the left of the decimal point and 2 digits after.

Transaction = Which transaction(s) the legacy field is mapped to, for example, the provider name is mapped to several HIPAA fields (billing prov, service prov, etc.) in multiple HIPAA transactions.

Pos# = This corresponds to the segments' positions within the transaction, as used in the HIPAA Implementation Guides.

SegID = The segment and field number which identifies each HIPAA data element.

HIPAA Name = The name of the data element in the HIPAA Guide.

DT = The second "DT" column is the data type and length of the HIPAA data element: AN=alphanumeric, ID=coded value, R=real number.

Req = This shows whether the HIPAA field is "R"equired or "S"ituational. If situational, the HIPAA Guide might describe the conditions under which the field is required, so the Guide must be consulted.

### ***List of All MMIS Reports:***

MMIS to HIPAA  
MMIS to HIPAA Data Length Problems  
HIPAA 270 to MMIS  
HIPAA 270 to MMIS mapped fields only  
HIPAA 271 to MMIS  
HIPAA 271 to MMIS mapped fields only  
HIPAA 276 to MMIS  
HIPAA 276 to MMIS mapped fields only  
HIPAA 277 to MMIS  
HIPAA 277 to MMIS mapped fields only  
HIPAA 820 to MMIS  
HIPAA 820 to MMIS mapped fields only  
HIPAA 834 to MMIS  
HIPAA 834 to MMIS mapped fields only  
HIPAA 835 to MMIS  
HIPAA 835 to MMIS mapped fields only  
HIPAA 837D to MMIS  
HIPAA 837D to MMIS mapped fields only  
HIPAA 837I to MMIS  
HIPAA 837I to MMIS mapped fields only  
HIPAA 837P to MMIS  
HIPAA 837P to MMIS mapped fields only

Other systems will be using fewer transactions than MMIS.

## **STEP FIVE: Data Analysis**

The purpose of doing the above data mapping is to use these reports as a starting point for further analysis. Some of the questions that need to be answered are:

- 1. Is it possible to create a valid HIPAA transaction from the data in this system?** In other words, can we retrieve or derive all HIPAA required data elements? If not, system analysts will need to evaluate whether to enhance your system, or convert to using MMIS, or some other option. To answer this question, use the "HIPAA 999 to XXXX Mapped Fields Only" reports, in combination with the relevant HIPAA Guide.
- 2. Is there a place in the HIPAA transaction for all legacy fields that need to be transmitted?** To identify what has already been mapped,

use the "XXXX to HIPAA" report. Then email the unmapped field name and field description and how it's used to Francine to research.

- 3. Whenever translating from HIPAA to a legacy record, do any of the legacy fields need to be longer?** With the HIPAA regulations, it is illegal to truncate any incoming data. The HIPAA field lengths are usually longer than legacy field lengths. To find where the HIPAA length is longer than the legacy lengths, use the "XXXX to HIPAA Data Length Problems" report. But each field needs to be researched before knowing whether you really need to lengthen the legacy field. For example, in MMIS the ICD9 code is 7 bytes, but the corresponding HIPAA field is 30 bytes. The HIPAA field is longer because that same field is used not just of ICD9, but for many other kinds of healthcare codes. Also the authors wanted to accommodate any future increases in length. But since we are fairly certain that we only need a 7 byte ICD9 code as far as we know, we wouldn't worry about making the legacy field longer.
- 4. What "downstream" changes must be considered as a result of changing the legacy system to accommodate HIPAA?** For example, given new fields and making fields longer in MMIS to accommodate HIPAA, what corresponding changes must be made in history files? The OnlyConnect tool is being enhanced so that we can map a "primary" legacy record to a "secondary" legacy record (or records from two different systems), e.g., MMIS RECIP-ELIG-FILE to the MMIS EDB file.